



MECKLENBURG COUNTY CODE ENFORCEMENT

RESIDENTIAL BUILDING CODE CLARIFICATIONS AND INTERPRETATIONS

NCRC 2018

Last Revision: Sept. 20, 2019



MECKLENBURG COUNTY
Land Use and Environmental Services Agency - Code Enforcement

Code Interpretation

SUBJECT: Public Way Definition
TRADE: Residential Building
REFERENCES: 2018 NCRC - Section R310.1 & Chapter 2.
NUMBER: RBCI-18-002

CODE:

- **R310.1 Emergency escape and rescue opening required.**

Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where *basements* contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a *yard* or court that opens to a public way.

- **[RB] PUBLIC WAY.** Any street, alley or other parcel of land open to the outside air leading to a public street, that has been deeded, dedicated or otherwise permanently appropriated to the public for public use and that has a clear width and height of not less than 10 feet (3048 mm).

INTERPRETATION:

Per R310.1 egress openings shall open directly into a public way, or to a yard or court that opens to a public way. In addition to the code's public way definition, MCCE will consider some private elements as part of the public way when they are permanently appropriated for public use. These include:

1. **Egress access easements** through private property. They must be recorded, permanent, transferable and cannot allow the construction of any permanent barriers that may block the egress pathway. This would include fences, sheds, room additions, etc.
2. **Private streets** in a gated community that allow unrestricted access to emergency responders. (i.e. knox box).
3. **Private yards, courts, alleys and community open spaces** that have a legal egress access agreement or are deeded to the public. The agreement must be permanent, transferable and cannot allow the construction of any permanent barriers that may block the egress pathway. This would include fences, sheds, room additions, etc.



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Legal agreements and deeds need to be approved by MCCE's legal counsel before project approval.
Legal review fees may apply.

APPROVED BY:



Building Code Administrator

11/15/2018

Date



MECKLENBURG COUNTY CODE ENFORCEMENT

Residential Building Code Interpretation

SUBJECT: R202 - Story, Attic Definition
REFERENCE: NCRC 2018 – Chapter 2, R305

CODE DEFINITION:

STORY, ATTIC. Any story situated wholly or partly in the roof, so designated, arranged or built as to be used for storage or habitation. If an attic that is accessible by a fixed stairway has a 7-foot clear height for greater than 50 percent of the floor area of the story below, then the space shall be considered as a story.

INTERPRETATION:

The intent of the Story, Attic definition is to allow the use of attic space while upholding to the residential code's structural limitations of buildings to three stories. Per MCCE's interpretation:

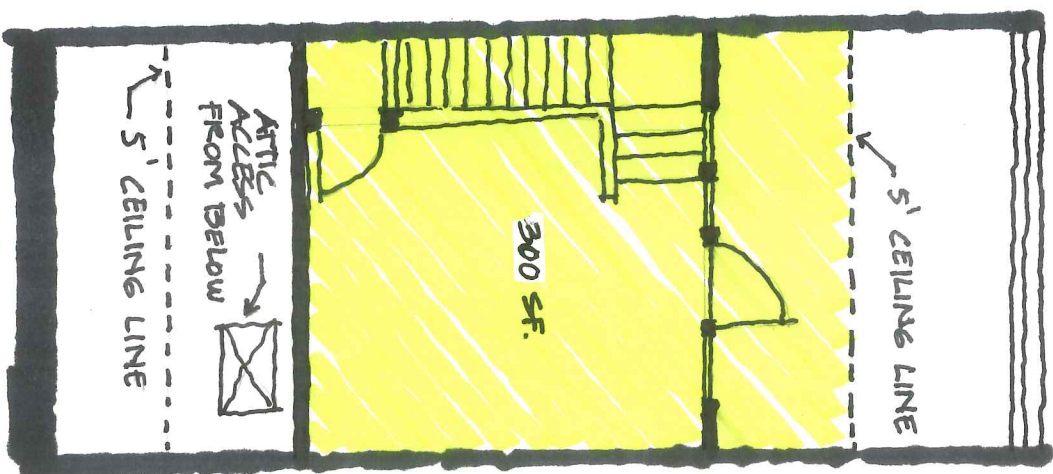
1. The Story, Attic will be limited in size to 50% of the floor area below. The attic area shall be measured to the 7 ft. ceiling line.
2. Only attics enclosed by gable or hip roofs meet the intent of code. Other roof profiles will be considered stories.
3. The occupiable area of the Story, Attic shall be centrally loaded in the span of the joists below so that the ridge of the roof aligns within the middle third of the span.
4. Dormers, window wells and mechanical wells are allowed, provided they are limited in size to comply with egress opening requirements and/or to the required mechanical clearances.
5. Unenclosed roof terraces are not considered stories per code. A stair landing is allowed for access but it is limited to 25 sf max.
6. Buildings with rooftop terraces on the same level of the attic can be allowed to have a maximum of one exterior wall on one side of the building, but the following conditions must be met as a tradeoff: (see attached examples)
 - The terrace is totally confined within the projected roof line
 - The 50% area limit will be measured to the 5 ft ceiling line of the projected roof line on both sides of the Story, Attic – the attic side as well as the roof terrace side.
 - No dormers or wells will be allowed on the remaining three sides of the building
 - Plans will include a sectional diagram showing compliance with all applicable items above.

APPROVED BY:

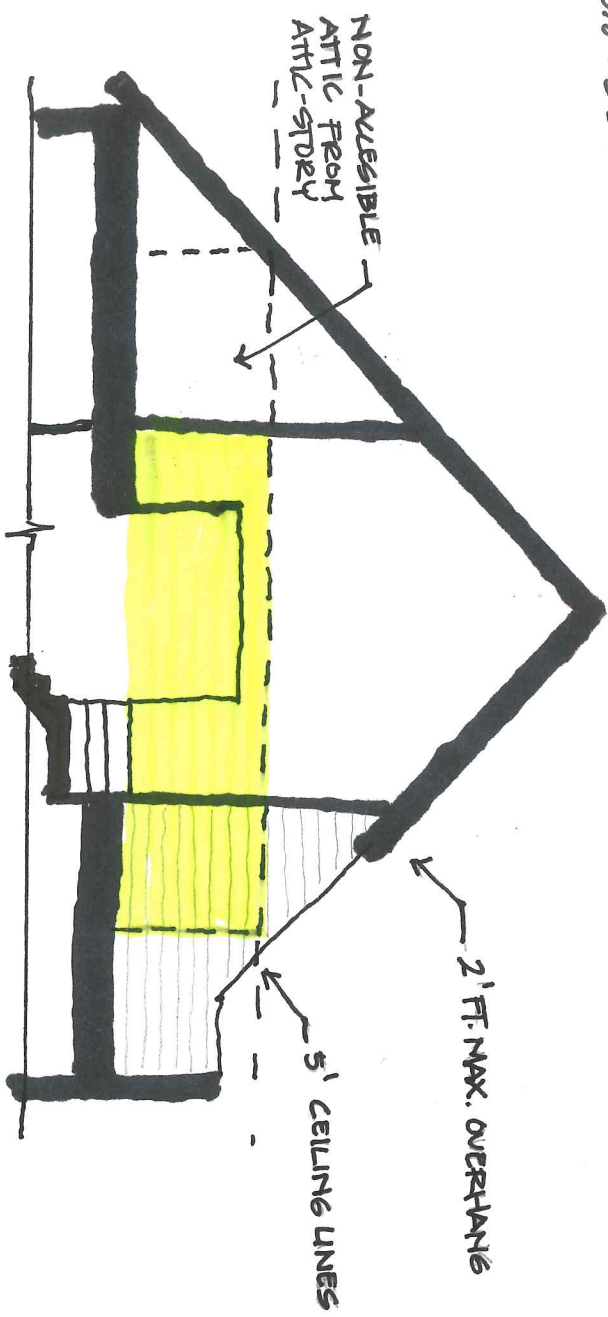

Jeff Vernon, MCP, CBO
Building Code Administrator

8/13/19
Date

EXAMPLE 1.



FLOOR AREA
BELOW = 624 SF
50% = 312 SF



EXAMPLE 2





MECKLENBURG COUNTY
Land Use and Environmental Services Agency - Code Enforcement

Code Interpretation

SUBJECT:	Horizontal H-studs on Area Separation Wall Assemblies
TRADE:	Residential Building
REFERENCES:	U336 and U347 Area Separation Wall Assemblies
EFFECTIVE DATE:	December 2018
NUMBER:	RBCI-18-003

ISSUE: The latest illustrations of U336 and U347 show that H studs can be used horizontally at 24" o.c. (Sections A-A & A-B).

CLARIFICATION: US Gypsum, National Gypsum and UL have informed MCCE that this drawing is incorrect, and that the assembly was not tested using horizontal H-studs. The drawings will be corrected soon. USG and NG continue to recommend the use of back-to-back C-runners, which are designed to friction-fit the vertical H studs.

GUIDANCE: Until further notice, the use horizontal H-studs will be not approved by MCCE.

APPROVED BY:



Jeff Vernon
Building Code Administrator, MCP, CBO

11/14/18

Date



Mecklenburg County Code Enforcement

Residential Building Code Interpretation

SUBJECT: R302.2.1 – Brick and stone exterior wall finishes projecting over property lines on townhomes.

REFERENCES: NCRC 2018 – R302.2.1

QUESTION:

Are exterior wall finishes such as brick veneer or adhered stone allowed to project from fire-resistance-rated separation walls on townhouses where there is a stepped roof or a wall offset condition?

ANSWER:

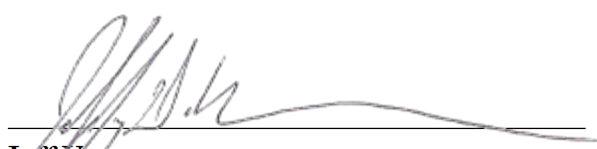
Yes, but only for the width of one masonry brick or one piece of stone. This includes any lintel used to support the brick or stone.

Townhome buildings with roof and/or wall offsets are often designed with the property line between two townhouses aligned along the exterior sheathing side of the fire-resistance-rated wall that separates them. As a result, brick or stone exterior wall finish materials and the lintel that supports them may end up projecting over the property line between the two townhouses.

Per Mecklenburg County Code Enforcement's interpretation, exterior brick and stone wall finishes and the lintel that supports them are allowed to project over the property line between two or more townhouses for the width of one brick or one piece of stone, since these materials do not increase the fire hazard to the adjacent building.

In fact, this practice may offer other benefits such as simplified framing layouts, simplified water protection details and possible additional fire protection. (e.g. brick may potentially add one hour of fire protection – see attached)

APPROVED BY:

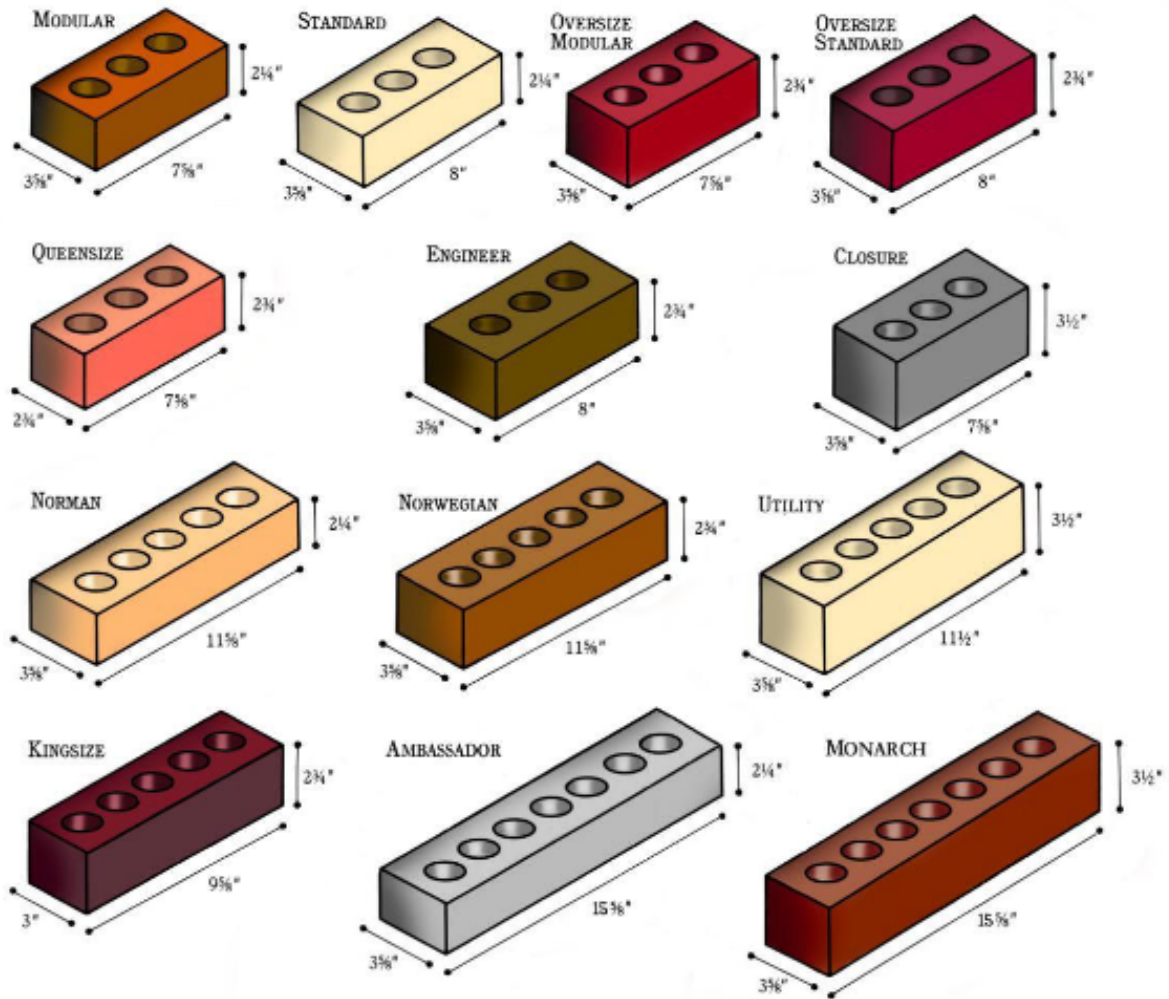


Jeff Vernon

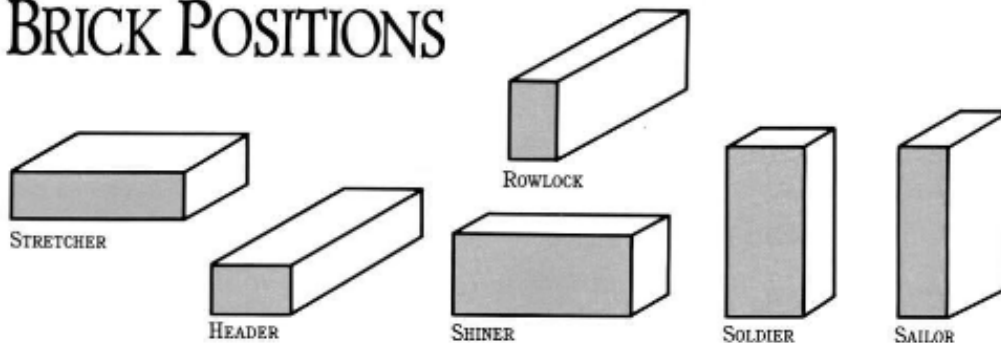
Building Code Administrator, MCP, CBO

2/26/2020

Date



BRICK POSITIONS



**TABLE 722.4.1(1)
FIRE-RESISTANCE PERIODS OF CLAY MASONRY WALLS**

MATERIAL TYPE	MINIMUM REQUIRED EQUIVALENT THICKNESS FOR FIRE RESISTANCE ^{a, b, c} (inches)			
	1 hour	2 hours	3 hours	4 hours
Solid brick of clay or shale ^d	2.7	3.8	4.9	6.0
Hollow brick or tile of clay or shale, unfilled	2.3	3.4	4.3	5.0
Hollow brick or tile of clay or shale, grouted or filled with materials specified in Section 722.4.1.1.3	3.0	4.4	5.5	6.6

For SI: 1 inch = 25.4 mm.

a. Equivalent thickness as determined from Section 722.4.1.1.

b. Calculated fire resistance between the hourly increments listed shall be determined by linear interpolation.

c. Where combustible members are framed in the wall, the thickness of solid material between the end of each member and the opposite face of the wall, or between members set in from opposite sides, shall be not less than 93 percent of the thickness shown.

d. For units in which the net cross-sectional area of cored brick in any plane parallel to the surface containing the cores is not less than 75 percent of the gross cross-sectional area measured in the same plane.

Given the Fire-resistance ratings from Section 722.4.1 of the NC Building Code (pasted above) which are based on the thickness of the brick; and given that the typical dimension for the narrowest clay brick as shown on the graphic on the next page is 2.75", it would appear that a 2 ¾" brick could achieve a 1 hour fire rating.

Additionally, considering that adhered stone is typically made of concrete or actual quarried stone, the supposition would be that adhered stone products would achieve at least as much fire-resistance rating as clay brick.